

ABSTRACT OF THE DISCLOSURE

A method, system and underwater camera for acoustic imaging of objects in water or other liquids includes an acoustic source for generating an acoustic wavefront for reflecting from a target object as a reflected acoustic wavefront. The reflected acoustic wavefront deforms a screen on an acoustic side and correspondingly deforms the opposing optical side of the screen. An optical processing system is optically coupled to the optical side of the screen and converts the deformations on the optical side of the screen into an optical intensity image of the target object.